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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

OGDEN JR, NECHOLUS

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/737,102

Applicant(s)

HUI SH ET AL.

Examiner

Necholus Ogden

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 47-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 47-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 47 and 51 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 47 states "50 weight percent to about 75 weight percent of a first methyl ester sulfonate" and 50 weight percent to about 25 weight percent of a second methyl ester sulfonate" wherein said ranges do not appear to be supported by the specification. Likewise the range of methyl ester sulfonates in claim 51 does not appear to be supported. Appropriate clarification and/or corrections are required.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 57 and 64 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The aforementioned claims state the phrase "substantially free of" wherein said phrase is not defined in the specification where one of ordinary skill in the art would be

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able to determine the metes and bounds of what encompasses "substantially free".

Does said phrase mean less than 5% or less than 0.5%? Appropriate clarification and/or corrections are required.

Specification

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 49 is objected to because the specification does not provide the basis for said claim.

Claim Objections

6. Claim 52 is objected to because of the following informalities: The term "stearine" is misspelled. The correct spelling is "stearin". Appropriate correction is required.

(1) REJECTIONS

7. Claims 30-46 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Barone et al (4,705,644) is withdrawn.

1. Claims 47-55, 58-62 and 64 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Huish et al (6,057,280).

Huish et al disclose a composition containing alpha-sulfo fatty acid esters and methods of making and using the same. A preferred embodiment includes from about 1 to about 100% by weight of a C16 or C18 alpha sulfofatty acid ester or another

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preferred embodiment includes from about 1 to about 99 weight percent of C16 sulfofatty acid and about 99 to 1% by weight of C18 sulfofatty acid (col. 4, lines 30-40). Moreover, Huish et al further includes additional detergent components such as zeolites, perborates, and polymers in a powder, tablet or other suitable shapes (col. 7, lines 38-47).

As this reference teaches all of the instantly required it is considered anticipatory.

In the alternative, if the above listed claims are not considered anticipatory, it would have been obvious to one of ordinary skill in the art to obtain the specific chain length sulfo fatty acid ester because it has been held that a prima facie case of obviousness may be made when chemical compounds have very close structural similarities and similar utilities. "An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." *In re Payne*, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA 1979). See *In re Papesch*, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) (discussed in more detail below) and *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991). Moreover, Compounds which are position isomers (compounds having the same radicals in physically different positions on the same nucleus) or homologs (compounds differing regularly by the successive addition of the same chemical group, e.g., by -CH₂- groups) are generally of sufficiently close structural similarity that there is a presumed expectation that such compounds possess similar properties. *In re Wilder*, 563 F.2d

457, 195 USPQ 426 (CCPA 1977). See also *In re May*, 574 F.2d 1082, 197 USPQ 601 (CCPA 1978, (stereoisomers prima facie obvious).

2. Claims 47-55, 57-62 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP (0336740).

EP '740 disclose a detergent composition comprising at least 50% by weight of a sulfo fatty acid ester comprising C12-C18 carbon atoms and a surfactant system in an amount from 2 to 50% by weight (pg. 1-2). Moreover, EP '740 includes a detergency builders such as silicates, crystalline and amorphous aluminosilicates and bicarbonates (pg. 3-4). Note, examples 1-6).

EP '140 does not specifically exemplify "enriching" applicant's alkyl ester chain lengths.

It would have been obvious to one of ordinary skill in the art to obtain the specific chain length sulfo fatty acid ester because it has been held that a prima facie case of obviousness may be made when chemical compounds have very close structural similarities and similar utilities. "An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." *In re Payne*, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA1979). See *In re Papesch*, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) and *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991). Moreover, Compounds which are position isomers (compounds having the same radicals in physically different positions on the same nucleus) or homologs (compounds differing regularly by the successive addition of the

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same chemical group, e.g., by -CH₂- groups) are generally of sufficiently close structural similarity that there is a presumed expectation that such compounds possess similar properties. In re Wilder, 563 F.2d 457, 195 USPQ 426 (CCPA 1977). See also In re May, 574 F.2d 1082, 197 USPQ 601 (CCPA 1978, (stereoisomers prima facie obvious).

1. Claims 47-64 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ospinal et al (5,965,508).

Ospinal et al disclose a soap bar composition comprising from about 30% to about 99% by weight of an anionic alpha sulfonated alkyl esters wherein said alkyl esters is a methyl ester having a mixture C₁₂-C₁₈ and with 96%C₁₆ (Table 17).

As this reference teaches all of the instantly required it is considered anticipatory.

In the alternative, Ospinal et al is silent with respect to "enriching" the composition with a C₁₆. However, it would have been obvious to one of ordinary skill in the art to comprise mixtures carbon atoms in the claimed amount, because said mixtures are taught and required by the art of record, absent a showing to the contrary.

1. Claims 47-55, 57-62 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sajic et al (5,616,781).

Specifically, Sajic et al lack a teaching of enriching the methyl esters with additional C₁₆ methyl esters.

Sajic et al disclose a liquid detergent composition comprising sulfonated alkyl ester and specifically C₁₂-C₁₆ sulfonated methyl esters (col. 4, lines 39-64) and other surfactants such as alkyl benzene sulfonates, amine oxides, betaines and nonionic

surfactants (col. 6, lines 40-47). Sajic et al teach that detergency builders may be employed in said composition and they include inorganic and organic builders (col. 13, lines 15-24); and also hydrotropes may be employed in an amount from 1 to 10% (col. 13, lines 53-66). Note, example 3 teaches 29.94% sodium alpha sulfonated methyl ester; 3.0% sodium xylene sulfonate; and the balance being water.

It would have been obvious to one of ordinary skill in the art to add additional carbon chain lengths to the mixture because Sajic et al specifically teach mixtures of fatty acids C12-C16 (col. 53-58). Therefore, absent a showing to the contrary, one of ordinary skill would have been motivated to include additional fatty acid mixtures to enriched the methyl ester sulfonate in view of the teachings disclosed in Sajic et al.

With respect to claim 47, the proportions are not specifically suggested in the preferred embodiments. However, the disclosure of Sajic et al encompasses said claimed proportion limitations and would have been obvious the skilled artisan, absent a showing to the contrary.

1. Claims 47-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vander Meer (4,597,898).

Vander Meer teaches detergent compositions which comprise from about 0.05% to about 95% by weight of a water-soluble ethoxylated amine having clay soil removal properties. In addition to the ethoxylated amines, the detergent compositions further comprise from about 1 to 75% by weight of a nonionic, anionic, ampholytic, zwitterionic or cationic detergent surfactant, or a mixture thereof. Additionally, the composition can contain from 0 to about 80% by weight of a detergent builder (see abstract). Suitable

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nonionic surfactants include polyalkoxylated alkanolamides and C10-C18 alkyl dimethyl amine oxides (col. 13, lines 39-col. 14, line 69). Suitable anionic surfactants include salts of alpha-sulfonated fatty acid containing C6 to C20 carbon atoms in the fatty acid moiety and from 1 to 10 carbon atoms in the ester group (col. 15, lines 55-69).

Suitable builders materials include carbonates, silicates, borates etc...(col. 7, lines 1-col. 18 line 40). The compositions may also include from 0 to 20% by weight of solvents and other adjunct materials (col. 19, lines 33-43 and 45-69).

Vander Meer does not specifically teach a composition enriching formulations

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition having enriching formulations as recited by the instant claims, with a reasonable expectation of success and similar results with respect to the other disclosed components, because the broad teaching of Vander Meer suggest a composition comprising each of the claimed components in their required proportions in the absence of unexpected results.

Response to Arguments

2. Applicant's arguments filed 3-28-05 have been fully considered but they are not persuasive

Applicant argues that EP '740 and Ospinal do not teach or suggest a composition having an enriching methyl ester sulfaonte

The examiner contends that EP '740 and Ospinal are silent with respect to the enriching of the methyl ester sulfonate. However, absent a showing to the contrary, one

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of ordinary skill would expect the methyl ester sulfonates to have an enriching formation because they include methyl ester sulfonates having C16 or C18 formation because EP '740 and Ospinal teach that water soluble salt of methyl ester sulfonates include sodium or potassium C16 or C18 formations which would encompass the enriching formations of the methyl ester sulfonates as claimed. Moreover, it is held that "The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem". It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. In re Linter, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972).

3. Claims 47-64 are rejected under the judicially created doctrine of double patenting over claims 1-27 and 1; 6-12; and 1-21 of U. S. Patent No. 6,683,039, 6,468,956 and 6,780,83 respectively is maintained.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Necholus Ogden whose telephone number is 571-272-1322. The examiner can normally be reached on M-T, Th-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Necholus Ogden
Primary Examiner
Art Unit 1751

no
10-30-2006